

PROJECT OVERVIEW (CONTINUED)

daily, weekly, and monthly traffic fluctuations.

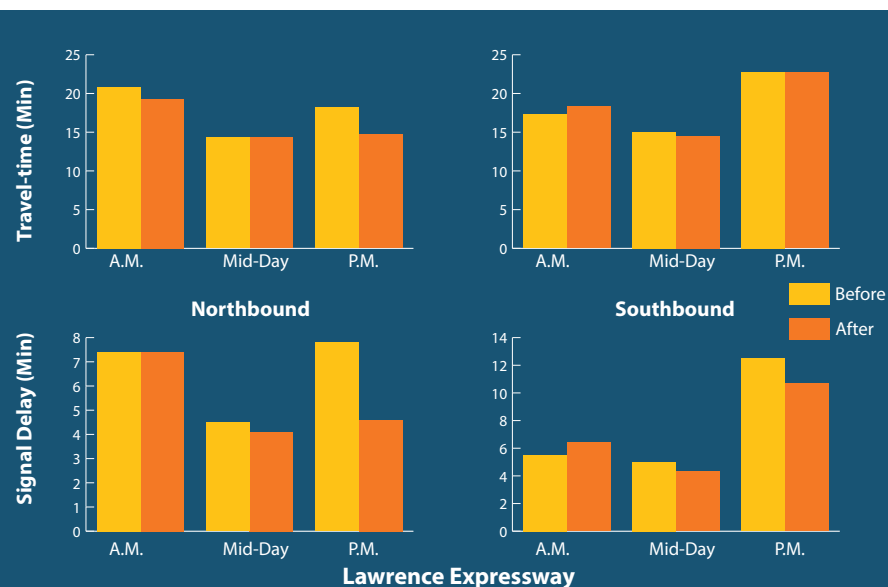
The PASS project involved the completion of the following major tasks: collect detector data and existing timing plan information; collect turning movement counts; conduct travel time surveys and delay studies along the project corridors; collect collision history; and document the analyses and findings of the project.

PROJECT BENEFITS

The traffic responsive operation will be in place during periods with varying volumes, such as during different times of the year when traffic is lighter (holidays or summer) or periods when traffic is heavier (during incidents on the freeway, when traffic diverts to the corridor). The use of more appropriate timing plans will result in reduced delay, vehicle emissions, and improved safety.

Existing bicycle and pedestrian timings were maintained with the traffic responsive timing. The implementation of traffic responsive timing did not have a negative impact on pedestrian and bicycle timings, and, in some cases, will even reduce the pedestrian and bicycle delay when lower cycle lengths are selected during lighter traffic periods.

Project Costs				
Consultant Costs (Basic Services/ Plans)				\$22,500
Consultant Costs (Additional Plans Responsive Timing for Expressways)				\$91,135
Other Project Costs (GPS Clocks, Communications equipment, etc.)				\$0
Agency Staff Costs (Estimate)				\$25,390
Total Costs				\$139,025
Project Benefits				
Measures	First Year		Lifetime (5 Years)	
	Savings	Monetized Savings	Savings	Monetized Savings
Travel Time Savings	178,710 hrs.	\$3,487,593	479,400 hrs.	\$9,355,666
Fuel Consumption Savings	522,123 gal.	\$2,014,961	1,400,626 gal.	\$5,405,248
ROG Emissions Reduction	1.63 tons	\$2,046	4.36 tons	\$5,487
NOx Emissions Reduction	1.09 tons	\$19,596	2.92 tons	\$52,567
PM2.5 Emissions Reduction	0.07 tons	\$20,741	0.18 tons	\$55,638
CO Emissions Reduction	17.32 tons	\$1,339	46.47 tons	\$3,592
Total Lifetime Benefits				\$14,878,199
Overall Project Benefits				Auto
Average Decrease in Travel Time				8%
Average Speed Increase				15%
Average Fuel Savings				6%
Average Reduction in Signal Delay				21%
Average Reduction in Number of Stops				21%
Overall Benefit-Cost Ratio				107:1



PROJECT BENEFITS SUMMARY



Average Reduction in Auto Signal Delay: 21%

Average Reduction in Number of Stops: 21%

Auto Fuel Consumption Savings: 6% or 1,400,626 gallons



Total Emissions Reduced (ROG, NOx, PM2.5, CO): 53.93 tons

Auto Travel Time Savings: 8% or 479,400 hours



Overall Project Benefit-cost Ratio = 107:1



For more info, please contact:

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